Fabrication Process for a Magnetic Tunnel Junction Device

ABSTRACT OF THE DISCLOSURE

A method of fabricating a magnetic tunnel junction (MTJ) device is provided. A patterned hard mask is oxidized to form a surface oxide thereon. An MTJ stack is etched in alignment with the patterned hard mask after the oxidizing of the patterned hard mask.

Preferably, the MTJ stack etch recipe includes chlorine and oxygen. Etch selectivity between the hard mask and the MTJ stack is improved.